DOCUMENT RESUME

ED 289 598 PS 017 031

AUTHOR	Copple, Carol E.; And Others
TITLE	Path to the Future: Long-Term Effects of Head Start in the Philadelphia School District.
INSTITUTION	Administration for Children, Youth, and Families (DHHS), Washington, DC. Head Start Bureau.
PUB DATE	Sep 87
NOTE	33p.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Academic Achievement; *Attendance Patterns; *Day Care; Early Childhood Education; Educational Policy; *Grade Repetition; Group Testing; *Outcomes of Education; *School Districts; Student Participation
IDENTIFIERS	*Philadelphia School District PA; *Project Head Start

ABSTRACT

An investigation was made of standard, nonexperimentally administered Head Start programs in the Philadelphia School District. Findings replicate and extend past findings that Head Start children more often avoided serious school problems than did control children. Head Start children were less frequently retained as they moved through the elementary grades. In later grades, they had better attendance rates and missed fewer standardized tests than did comparison children. The Philadelphia data also confirm the consensus of past Head Start and other intervention studies in finding little or no lasting effect of early childhood programs on achievement test scores. After a brief introduction to the Philadelphia study in Chapter I, Chapter II describes the data base and explains how findings are presented and interpreted in the report. The principal findings of the Philadelphia study are summarized in the next two chapters; Chapter III concerns students' absences and participation in testing programs, and Chapter IV reports on retention in grade and achievement test performance. Chapter V discusses how Head Start produces lasting effects and considers policy implications of the Philadelphia findings and other research results. (RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED289598

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Office of Human Development Services
Administration for Children, Youth and Families
Head Start Bureau

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

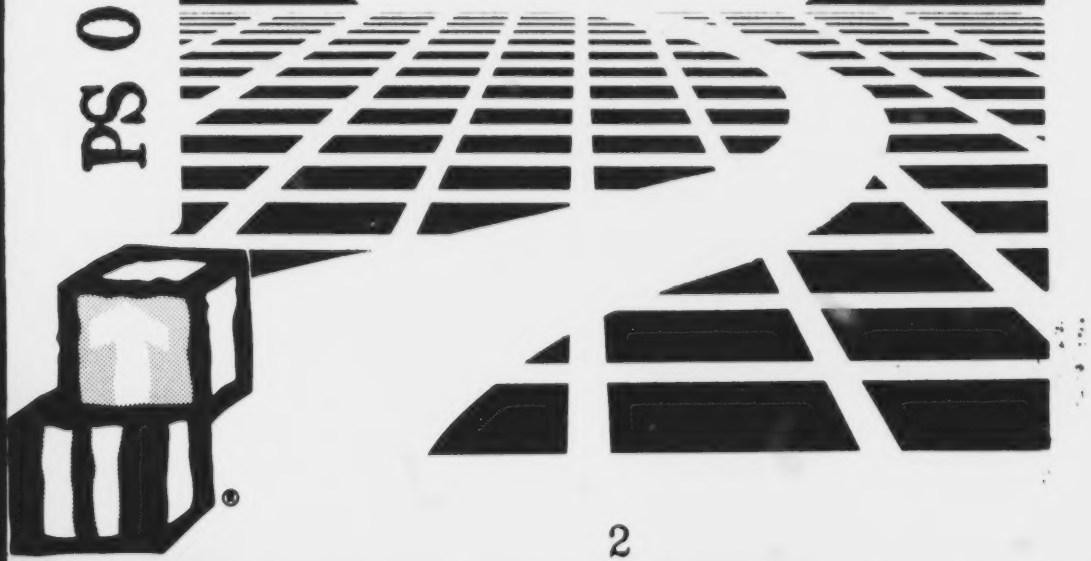
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PATH TO THE FUTURE:

Long-Term Effects Of Head Start

In The Philadelphia School District

PS 017031



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Office of Human Development Services
Administration for Children, Youth and Families
Head Start Bureau

PATH TO THE FUTURE:
Long-Term Effects Of Head Start
In The Philadelphia School District

Authors:

Carol E. Copple

Marvin G. Cline
Virginia Polytechnic Institute and State University

Allen N. Smith
Government Project Officer

FOREWORD

From the beginning over twenty years ago, Head Start has been an ambitious program. It has sought to change the lives of children, families and communities, and it has done so. This report adds to the growing body of evidence that early childhood programs like Head Start can have lasting effects. Most recent and impressive are the findings of the Consortium for Longitudinal Studies, a collaborative follow-up on children who attended 12 different early childhood programs around the country. As encouraging as the Consortium results are to the Head Start community, we have been eager to know whether Head Start programs show the same kind of long-term effects. The Philadelphia data provide the opportunity to examine this question.

The School District of Philadelphia collected a large data base that follows children through the elementary grades. The results confirm that Head Start is significantly reducing school failure. Even more importantly, the Philadelphia findings point out directions for further improvement of the Head Start Program.

Dr. Jerry Cline, of Virginia Tech, made a key contribution by initiating and managing the analysis of the Philadelphia data. We thank all those involved for their time and effort, particularly the School District of Philadelphia and the Head Start staff of Region III. Such research and evaluation projects are vital to Head Start's ongoing efforts to maximize program effectiveness. We are particularly encouraged when local Head Start staff initiate such efforts, seeking to know how well they are doing their jobs and how they can do even better. With such commitment, Head Start will continue to increase its effectiveness over the next twenty years.

Clennie Murphy, Jr.
Acting Association Commissioner
Head Start Bureau

September, 1987

TABLE OF CONTENTS

FOREWORD iii

I. INTRODUCTION 1
- The Philadelphia Study 2
- What Do the Philadelphia Data Tell Us? 3
- Organization of the Report 4

II. DESCRIPTION OF THE DATA 5
- The Preschool Variable 6
- Attrition 6
- Effect Size 8

III. SCHOOL PARTICIPATION: ABSENCES AND MISSING TESTS 11

ABSENCES 11
- The Philadelphia Study 11

MISSING TESTS 14
- The Philadelphia Study 14
- Missing School and Missing Tests 16

IV. SCHOOL SUCCESS: RETENTION IN GRADE & ACHIEVEMENT TEST PERFORMANCE 17

RETENTION IN GRADE 17
- The Philadelphia Study 18
- Significance of Retention in Grade 20

ACHIVEMENT 20
- The Disparity in Head Start's Impact on Retention and Achievement 21

V. LASTING EFFECTS OF HEAD START: DISCUSSION AND POLICY IMPLICATIONS 23
- Through What Dynamics Are Head Start Effects Sustained? 23
- Long-term Cognitive Effects? 24
- Adaptive Skills? 24
- Greater School Commitment (or Less School Avoidance)? 25
- Effect on Parents 25

FUTURE DIRECTIONS 26
- Extending Parent Involvement 26
- Helping Sustain Head Start Children's Gains in Public Schools 27
- Meeting Individual Needs 28
- In Conclusion 28

I. INTRODUCTION

In the mid-1960s, America made a national priority of breaking the poverty cycle. As educators and policymakers were well aware, children from low-income families had less school success than other children. They started behind and they fell farther behind each year. They performed more poorly on standardized tests and were retained in grade more frequently. Further, many low-income children were not active, stable participants in the schooling process. They missed school more frequently, presented discipline problems, failed to complete assignments, and, increasingly in the later grades, dropped out. The cycle of economic and social dependence repeated itself.

Head Start sought to break this cycle by enabling children to do better in school. To prevent school failure, the program would begin *before* school—to get children off to a better start. Head Start proposed to give children of low-income families the kinds of competence needed for successful transition to the school environment. From the outset, Head Start has also sought to enhance parent-child interaction and to improve the child's ongoing home environment by increasing parents' coping skills, confidence, resources and support systems. Helping children's families and communities, it was recognized, would help the children themselves in the short run and in the long run.

Thus, the goals of Head Start have always been far more comprehensive than increasing test scores. Head Start has striven to improve children's health status, social-emotional development and family environment. Yet most of the earlier research on the program asked a limited question: Do Head Start children score higher than non-Head Start children on IQ tests? When children were tested at the termination of their Head Start experience, the answer generally was yes. After a few years, researchers began to use other measures as well, most frequently performance on achievement and readiness tests. And, as the early cohorts of Head Start children moved through the elementary grades, researchers began to ask another question: How lasting are the effects of Head Start.

Response to the lasting effects question can be divided roughly into two eras. The first era might be said to have begun with the bleak conclusions of the Westinghouse study, which started to emerge just a few years after Head Start began in 1965, and persisted until nearly the end of the 1970s. Based on available findings, consisting mostly of standardized test scores, the conventional wisdom of this era was that Head Start produced substantial immediate gains which gradually washed out after children left the program.

What began to change the picture were the more encouraging findings of the Consortium for Longitudinal Studies, which mounted a massive effort to pool and reanalyze the data of 12 exemplary early intervention studies and to follow up on subjects who had been in these programs.[1] From the original collective sample of about 3,700 children, more than 2,000 ranging in age from 10 to 17 were located, tested and interviewed. In addition to the original data on IQ scores and the like, the Consortium looked at other indicators of students' functioning in school, such as placement in special education and retention in grade. One of the Consortium participants, David Weikart, with his colleagues in Ypsilanti, Michigan, followed program and control children to age 19 and looked at an even wider array of "real-life outcomes," including arrests, unemployment and teenage pregnancies.[2]

These newer and broader follow-ups on the impact of early intervention present a more encouraging picture. While they generally replicate the finding that gains in test scores are not sustained, they find evidence that program children do look different from comparison children on a variety of later outcomes—outcomes of importance in the lives of children and their families. As we shall discuss, significant shortcomings in the previous literature are filled by the study reported here, which employed a data base gathered by the School District of Philadelphia from 1970 to 1979.

The Philadelphia Study

This study falls within the second era of research on Head Start and other early intervention projects. The Philadelphia data base includes a number of measures beyond standardized test scores, such as attendance and retention rate, and provides more evidence of lasting Head Start effects in such areas. *The Philadelphia data base is based on a large number of children and schools, representing typical Head Start programs more accurately than have the samples in previous large-scale studies.*

Of studies that have looked at long-term outcomes beyond standardized tests, most are based on small numbers of children or on programs closely monitored by researchers. Since such studies could employ controls generally not feasible in school districts, they have great value in examining program outcomes. On the other hand, the programs on which many studies were based may not be entirely typical of Head Start programs as a whole.

---

[1] Consortium for Longitudinal Studies. *Lasting Effects After Preschool*, Washington, D.C.: U.S. Department of Health and Human Services, Administration for Children, Youth and Families, 1978.

[2] John R. Berrueta-Clement, Lawrence J. Schweinhart, W. Steven Barnett, Ann S. Epstein, David P. Weikart. Changed Lives: The Effects of the Perry Preschool Program on Youths Through Age 19. *Monographs of the High Scope Educational Research Foundation*, 1984, 8.

The projects studied by the Consortium for Longitudinal Studies were, in certain ways, in a class by themselves. Conducted by 12 teams of well-known preschool educators around the country, the projects differed in curriculum and style of instruction, but they had many things in common. All were characterized by careful planning and monitoring, curriculum development, intensive staff development and evaluation-based feedback. Professional resources normally available only in university research projects and laboratory schools flooded these preschools. Teachers and aides, in close touch with project directors and staff, received ongoing support, and they knew their efforts were being carefully watched. The families in the Consortium projects were selected from those willing to participate in an extended research project, which constituted a considerable time commitment. Parent involvement was unusually high, and project staff kept in touch with families after children had left the preschool program. These conditions are radically different from those in a program like Head Start that is implemented on a massive scale, and certainly these conditions are not normally feasible in Head Start/public school settings.

What we learn from such studies is that when early intervention programs are conducted with abundant resources and care, they can benefit educationally at-risk children. What they do not tell us is what is accomplished by the usual Head Start program, which is not operated or monitored by researchers, with far fewer resources and far less fanfare.

The Philadelphia data are appropriate for examining the impact of standard, non-experimentally administered Head Start programs. Gathered by the School District of Philadelphia, the data base includes Head Start/Follow Through programs in 33 schools and follows the children into hundreds of schools within a large urban area. The diversity of children's experiences in this sample is far greater than in samples like those in places like Ypsilanti, Michigan, or Murfreesboro, Tennessee (Consortium sites), where there was substantial homogeneity in children's experiences both during and after preschool. The large number of schools and subjects in the data base increases the likelihood that findings are representative of the great mass of Head Start programs, particularly those in urban areas.

What Do the Philadelphia Data Tell Us?

The Philadelphia data replicate and extend past findings that, compared to control children, Head Start children more often avoided serious school problems. As they moved through the elementary grades, Head Start children were less frequently retained in grade. In later grades, they had better attendance rates and missed fewer standardized tests than comparison children. These effects, while somewhat less dramatic than those in resource-intensive research interventions, demonstrate that regular Head Start programs achieve significant and lasting changes.

The Philadelphia data also confirm the consensus of past Head Start and other intervention studies in finding little or no lasting effect of early childhood programs on achievement test scores. As in past studies, the immediate advantage shown by Philadelphia Head Start children was not sustained in later grades. Nevertheless, as compared to non-Head Start children, Head Start graduates maintained a relatively positive and consistent relationship with the school, even when their test performance was relatively low. To maximize Head Start effectiveness in the future, we need to understand the dynamics through which long-term effects have been produced. Perhaps Head Start programs reduce the helplessness that parents feel in response to school. Instead of seeing the school as a mysterious and forbidding place where poor children are doomed to fail, Head Start families and children may come to see school as a place where they can hold their own. Another possibility suggested by some research findings is that Head Start children learn ways of behaving in school that work to their advantage. Children may well learn how to function more smoothly in the school environment and how to adapt to school demands. Perhaps they are trying harder; or it may be that positive early classroom experiences make children less hostile or fearful. Their parents may be supportive of their efforts in school or more comfortable and competent in parenting.

At any rate, children who have attended Head Start more often appear to teachers to be functioning adequately at grade level within the regular classroom. Whatever the reasons, the Head Start children in the Philadelphia study did show a greater tendency than other children to "hang in there." They did not opt out or "fall out" of the system as frequently as their non-Head Start counterparts. They attended school and took tests with more regularity; they were less likely to be identified as students requiring retention in grade. These may not be the dramatic transformations dreamed of by policymakers, educators and parents. But they are far from trivial. The picture that emerges from the Philadelphia data, in the context of other studies in the literature is this: *The long-term impact of Head Start is in reducing school failure.* As a result of Head Start, children and their families appear to have a more positive and involved relationship with the school.

Organization of the Report

Chapter II: Description of Data briefly describes the data base and explains how findings are presented and interpreted in this report. The principal findings of the Philadelphia study are summarized in the next two chapters: *III. School Participation: Absences and Missing Data;* and *IV. School Success: Retention in Grade and Achievement Test Performance.* The final chapter (*V*) discusses the question *"How Does Head Start Produce Lasting Effects?"* and considers policy implications of the Philadelphia findings and other research results.

II. DESCRIPTION OF THE DATA

The Philadelphia data base was a large one, with ten years of data on subjects from Head Start/Follow Through programs in 33 schools.[1] The School District of Philadelphia, under contract with the U.S. Department of Education, collected data on all children who attended Philadelphia Follow Through programs from 1970 to 1979. The base merged two data sets: (1) data collected while the children were in Follow Through classes (kindergarten through third grade); and (2) data collected after students completed the Follow Through grades, including data from system-wide testing programs.

Four cohorts were included in the analyses reported here:

- ***Two early cohorts,*** who began Follow Through in 1970 and 1971, were part of the National Follow Through project.[2] The national evaluation collected data on these cohorts from kindergarten through third grade. These two cohorts were selected primarily because by 1979 they had completed the elementary grades and thus provided more years of follow-up data than any other cohorts. Because several information categories were not reliably recorded in these years, the early cohorts could not be used for all analyses.
- ***Two later cohorts,*** who began Follow Through in 1974 and 1975, were in Philadelphia Follow Through programs and were tested according to local Philadelphia procedures. These cohorts were chosen because the full range of data on them was reliably recorded; at the time the base was completed they had been in school only through fifth and fourth grades respectively.

In some instances, the data collected on the four cohorts were sufficiently comparable that they could be considered replications. In other cases, the data on one pair of cohorts were more appropriate than the other for addressing a specific research question.

---

[1] A complete description of the methodology and the full range of analyses performed is available in Marvin G. Cline, *Technical Report: Long-term Effects of Head Start in the Philadelphia School District* (in press).

[2] It should be noted that "Follow Through" refers to two distinct programs: (1) the National Follow Through project, with a federally sponsored set of programs and a national evaluation (centrally organized and administered); and (2) Follow Through programs and evaluations designed and implemented by the School District of Philadelphia.

The Preschool Variable

Since admission to Follow Through was never contingent on having attended Head Start, the data base included children who had not been in Head Start as well as those who had. Consequently, it was possible to examine the importance of preschool experience.

In the 1970 and 1971 cohorts, the public schools administered the Head Start programs in Philadelphia under the name "Get Set." During these years, Head Start and Get Set were synonymous. By the time of the 1974–75 cohorts, Head Start and Get Set in Philadelphia were technically separate; however, the only real difference was in the population served. Some families in Get Set were above the Head Start income-eligibility cutoff, so Get Set children as a group were somewhat less disadvantaged. For purposes of this study, children in the 1970 and 1971 cohorts were simply classified as Head Start or non-Head Start. In the 1974 and 1975 cohorts, analyses were based on two Preschool groups (Head Start and Get Set) and one No Preschool group.

Numbers of Subjects. For each group within each of the four cohorts, Table 1 shows: (a) the number of children that were rostered in the Philadelphia School District in kindergarten; and (b) the percentage of the original group that were rostered for all the data collection years for that cohort. Numbers of subjects included in a given analysis varied slightly with cohort, grade and variable.

Attrition

Attrition, that is, subjects disappearing from the data base, was far more prevalent in the Philadelphia data base than in studies such as those by the Consortium for Longitudinal Studies.[1] In Philadelphia up to 70 percent of the children (varying with cohort and treatment group) left the base at some point between kindergarten and sixth grade; some of these left and reappeared in a later grade.

Why was attrition in the present study so high? One factor is higher mobility in large urban areas, but a number of low-attrition studies have been conducted in large cities, for instance, the Consortium projects in New York, Detroit and Philadelphia itself. The principal reason for low attrition in such studies was the abundant resources devoted to keeping in contact with and locating families. In addition, these low-attrition projects were following relatively small numbers of children and thus could devote considerable effort to keeping as many as possible in the data base.

The present Philadelphia project was quite different in nature; data were those maintained in the course of routine school district record keeping. When a child was not rostered in the School District of Philadelphia in a particular year, there were no data on

[1] Consortium for Longitudinal Studies, *Lasting Effects After Preschool*, 1978.

Table 1. Children in Philadelphia Data Base

COHORT (Only Follow Through Children)	(a) Number of children at start of Kindergarten	(b) % of (a) remaining in sample by end of study	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978*	1979
						Follow Through							
1970													
Head Start	426	66%	Pre→	K	1	2	3	4	5	6	7	*8*	
No Head Start	827	31%		K	1	2	3	4	5	6	7	*8*	
1971													
Head Start	656	62%		Pre→	K	1	2	3	4	5	6	*7*	
No Head Start	788	34%			K	1	2	3	4	5	6	*7*	
1974													
Head Start	348	77%					Pre→	K	1	2	3	*4*	5
Get Set	984	71%						K	1	2	3	*4*	5
No Preschool	4688	71%						K	1	2	3	*4*	5
1975													
Head Start	334	84%						Pre→	K	1	2	*3*	4
Get Set	843	76%							K	1	2	*3*	4
No Preschool	4820	71%							K	1	2	*3*	4

**Data collection was not possible in 1978 because of a teacher strike.*

that child. Thousands of children were on the data base, and there were no resources for tracking and testing children not in the school district.

The impossibility of following up on children no longer rostered in the school district yielded an interesting finding: Children were not lost from Preschool and No Preschool groups to an equal extent, particularly in the 1970–71 cohorts (as Table 1 shows). Attrition was as high as 69 percent for some cohorts and as low as 16 percent for others. A large proportion of the attrition took place between kindergarten and first grade.

It is possible that benefits to families from Head Start participation, as well as lasting benefits to children's adjustment to school, reduced the likelihood that those families would move away. Although the No Preschool groups appeared to be demographically comparable to the Preschool groups, it is possible that the families differed in some ways that were not apparent to local project staff. The premise that Head Start participation may contribute to lower attrition is not implausible given Head Start's documented benefits to communities, families and children.

For the purpose of the present study, differential attrition across groups posed some challenges for analyzing outcome measures. In a situation with differential attrition, analysis approaches for each issue must be selected with care and findings must be examined across cohorts and analyses.

Effect Size

Effect sizes are statistics that compare the performance of two groups, which might be called the treatment group (in this case, Head Start or Get Set) and the control group (here, the group that did not attend preschool). The difference in the means of these two groups is divided by the standard deviation of the control group to yield the effect size.

All tables in this report present effect sizes based on the difference between Head Start (or Get Set) children and comparison children who did not attend preschool. In these tables, a positive effect size means that a more favorable outcome was found for Head Start/Get Set children than for nonpreschool chidren. (For ease of interpretation, on variables like retention in grade for which high values were undesirable, the tables are designed so that positive effect sizes represent *lower* values, in this example, progressing normally without being retained in grade. Thus, in these tables positive effect size is *always* favorable for Head Start/Get Set children). A negative effect size would mean that nonpreschool chidren did better than children with experience in Head Start/Get Set.

Effect Size and Policy Significance

It is not possible to state a hard-and-fast rule for how large effect sizes must be in order to be of practical significance. Certainly, the larger the effect size the greater impact we are seeing. More children have moved a greater distance on the dimension in

question. Effect sizes of .20 or greater are quite large and hard to dismiss. Effect sizes from .10 to .20 are considered moderate.

With the large numbers of subjects in the Philadelphia data base, effect sizes as small as .03 or .04 were derived from group differences that were statistically significant at the .05 level. Effect sizes from .03 (approximately where statistical significance is reached) to .10 are considered low. [Note: it is not effect sizes *per se* that are statistically significant. What is shown in the tables (as the beginning of the Low range) is the point at which we begin to find significant differences in the data from which the effect sizes were derived].

For several reasons the Philadelphia data base was a "noisy" one. Information was gathered by hundreds of different individuals over 10 years in dozens of different schools. Some record keepers are more painstaking than others; some systems are more reliable and efficient, and record-keeping systems change over time. District-wide and school-wide policy changes in areas like retention increase variability. All these factors add to the noise, which usually depresses the real magnitude of an effect size. So when a signal is picked up—a statistically significant finding—it should be taken seriously. The use of multiple cohorts allows us to see whether effects are replicated across time. When there is convergence of findings across several cohorts or across several conceptually related measures, we must take particular notice.

III. SCHOOL PARTICIPATION: ABSENCES AND MISSING TESTS

ABSENCES

More Head Start than non-Head Start children were below the median in days absent in the elementary grades.

If Tom comes to school consistently and Jim misses more than 60 days a year, what does it mean? In most cases one would assume that Jim, his family or both have more negative attitudes or reactions to school than Tom and his family. The correlation of attendance with variables like achievement scores and grades supports the idea that high absence rates are, to an extent, a response to school failure (of course, the effect may operate in the other direction as well, with children's low attendance diminishing their learning). We will return to considering the meaning of absence rates after examining the findings in the literature and in the Philadelphia study.

Attendance was included among the follow-up indicators in the Perry Preschool Project in Ypsilanti, Michigan, which served a population similar to that of Head Start.[1] In kindergarten through 6th grade the average absence level was about 12 days per year for preschool graduates and 16 days per year for comparison children. In the 1985 follow-up data of the New York State Experimental Prekindergarten Program, prekindergarten participants had significantly fewer absences in grades K–6, an average of 9 days per year as contrasted with 11 days per year for control students.[2]

The Philadelphia Study

The Philadelphia study examined absence in two ways: (1) as in previous studies, the average number of days absent per year for preschool and nonpreschool groups; and (2) the percentage of children in each group with fewer than the median number of absences.

Days Absent. Analyses for days absent were based on the children for whom there were six full years of data, i.e., those children from the 1970–71 cohorts who were rostered each year of data collection. The average number of days absent was consistently lower for Head Start children, though the difference reached significance only

[1] Berrueta-Clement, et al. Changed Lives. *Monographs of the High/Scope Educational Research Foundation*, 1984, *8*.

[2] New York State Experimental Prekindergarten Program: Follow-up Study. Unpublished report (Albany, NY), December, 1985.

for the fifth grade. When means were totalled across three grades for the 1970 and 1971 cohorts, the non-Head Start children had 49 and 47 days absent respectively, while the Head Start children had 43 and 41. Thus, Head Start children had an average of two fewer days absent per year than non-Head Start children. Though group differences in days absent were not large, a consistent pattern of lower absence rates for Head Start graduates emerged across grades and cohorts.

Percentage of High-Absence vs. Low-Absence Children. While approximately half the children in each cohort were absent no more than 10 days a year, the annual absences of the other half ranged from 11 to over 70. Such absence levels are heavy enough to be of practical significance, particularly for children who fall in the high-absence group year after year. For all four cohorts children who fell in the high-absence group for each rostered year were classified *high-absence children* (and likewise, children who were never over the median in absences were *low-absence children*). The next question was whether Head Start children were more likely to be in the low-absence group.

The answer to this question is presented in Table 2, which displays the effect size for each cohort. In the 1974 and 1975 cohorts for Get Set[3] and the 1975 cohort for Head Start, effect sizes favoring program children were high. As compared to nonpreschool children, preschool graduates were far more likely to be low-absence children, that is, below the median in absences each year. For the 1971 cohort, more Head Start children were in the low-absence group, though the effect size was modest.

Significance of the Absence Variable

What factors in the child's life does the absence variable reflect? Of course, children miss school because of illness. But when each year the same child is in the high-absence group, other causes appear more likely—for instance, that the parents do not stress school attendance or that the children are avoiding school. A pattern of significant group attendance differences across cohorts as a function of preschool experience also suggests an effect other than individual differences in illness. Examining the variables correlated with attendance can shed further light on the meaning of children's absences.

A study of 59 children from three upper New York programs found that attendance was related to performance on cognitive measures.[4] In a follow-up of Head Start vs. non-Head Start children in Maryland, Hebbeler found attendance significantly

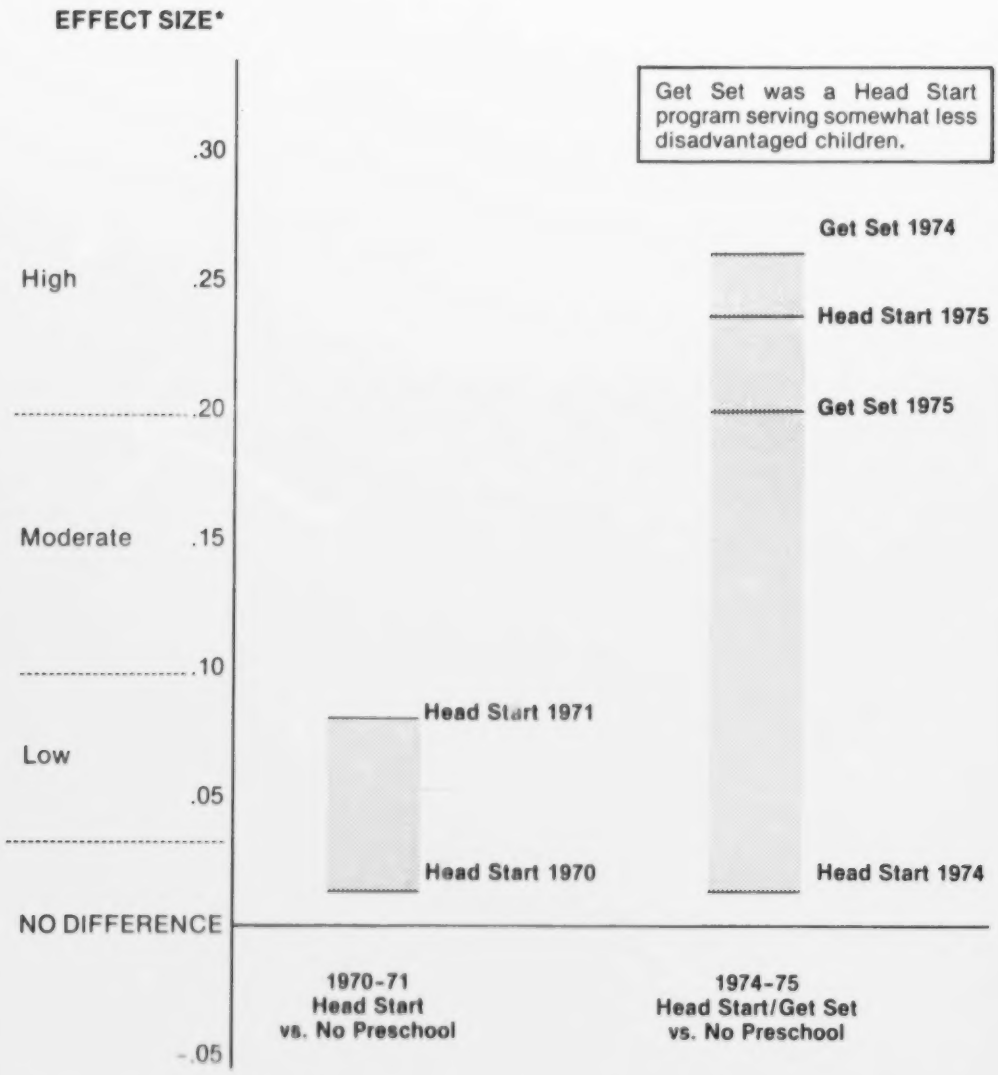
---

[3] Get Set data were analyzed and reported separately because Get Set appears to have served children from a slightly higher socioeconomic level than Head Start. However, for all practical purposes, Get Set was a Head Start program.

[4] Lindsey A. Weld. Family characteristics and profit from Head Start, *Dissertation Abstracts International,* 1973, *34* (3-B): 1172.

Table 2. Effect Sizes for Attendance

(Based on group differences in % of children with below median number of absences in every grade)



*Positive effect size = More favorable outcome for Head Start/Get Set children than for comparison children

related to grades in secondary school.[5] The relationship was weak in the early years and became progressively stronger. Absence was also found to be related to retention in grade, leaving school, overall class rank and placement in special education.

For elementary school children as an overall group, absence is related to academic performance. This relationship is probably to some extent circular, with low achievers avoiding school and children who avoid school having less chance to benefit from instruction and thus continuing to perform at a low level. Interestingly, for Head Start children in Philadelphia, the link of low achievement to low attendance was significantly diminished. Even Head Start children doing poorly in school tended to maintain an above-average level of attendance.

To summarize the absence results, from kindergarten through sixth grade, Head Start children averaged two fewer days per year than comparison children. In three of four cohorts, a higher proportion of Head Start/Get Set children than nonpreschool children consistently had low absence levels. Moreover, for Head Start children low achievement was less likely to be accompanied by high absence rates.

MISSING TESTS

Children who attended Head Start missed fewer standardized tests than comparison children without preschool experience.

In the Philadelphia data base there were numerous instances where test scores for one or more grades were missing for children rostered in those grades. Researchers usually see missing data as a nuisance and, when possible, fill in the gaps by some method of estimation. Such estimation techniques are not appropriate when some experimental groups have more missing data than others, as was the case in this study. In fact, there are instances in which group differences in amount of missing data reflect a program outcome. In the Philadelphia data, group differences in missing data appear to be a Head Start outcome and an interesting finding in their own right.

When one group of children misses tests in greater numbers than another group, it is reasonable to ask why. Are these children avoiding the pressure, the risk of failure they perceive in standardized tests? Past studies have not looked at missing data in this light, so there is no literature that bears on the issue. To get a firmer grip on the meaning of the missing tests, we must rely on what can be gleaned from the Philadelphia data base.

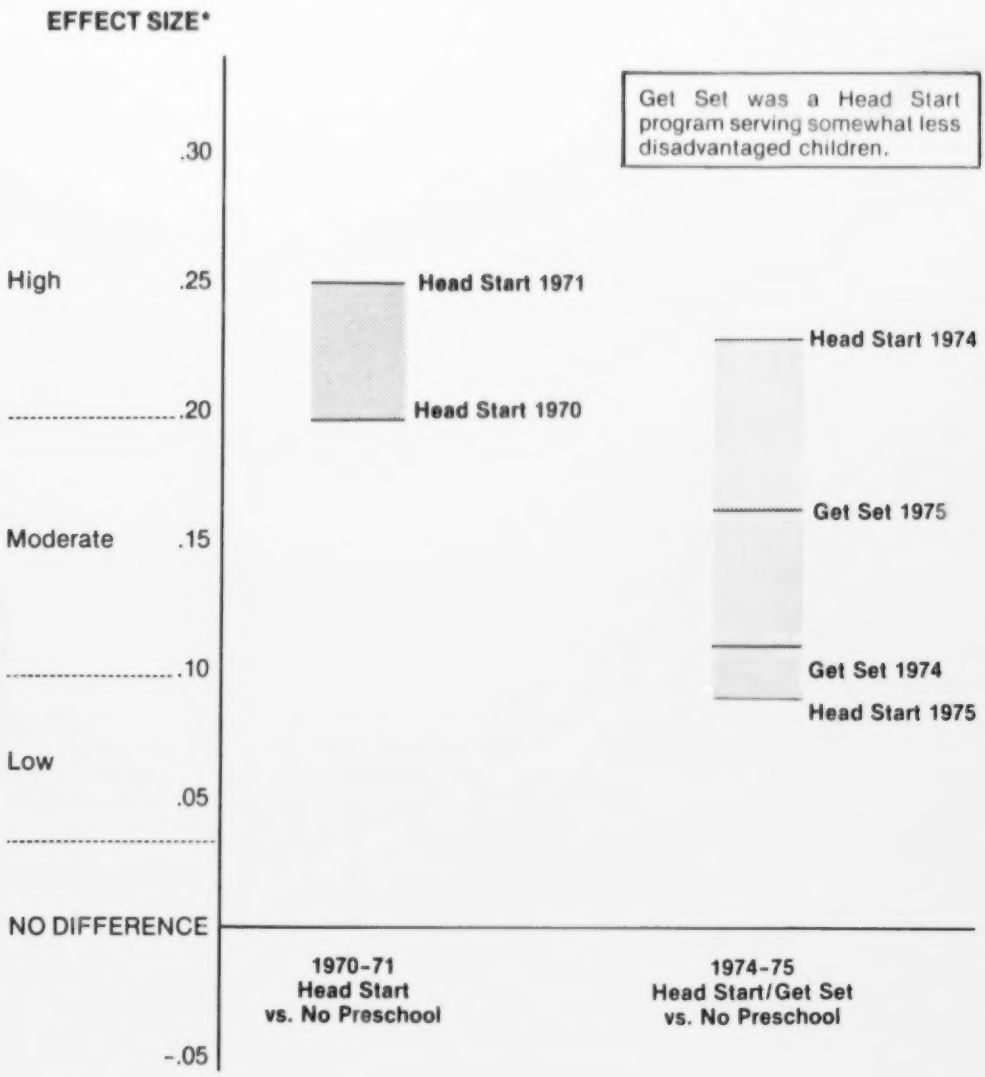
The Philadelphia Study

Each child's "missing test index" was the percentage of the total number of grades (in which the child was positively identified as rostered) for which no test score was

[5] Kathleen Hebbeler. *An Analysis of the Effectiveness of Head Start and of the Performance of a Low-income Population in MCPS*, Rockville, MD: Montgomery County Public Schools, March, 1985.

Table 3. Effect Sizes for Taking Tests

(Based on group differences in % of tests missing)



*Positive effect size = More favorable outcome for Head Start/Get Set children than for comparison children

recorded. The analyses that generated Table 3 included only children in the school district for the full range of grades for which data were collected (i.e., non-attriters). Table 3 presents the effect sizes based on differences between Head Start/Get Set children and nonpreschool children on the missing test index.

In the 1970 and 1971 cohorts there was a sizable effect favoring the Head Start children. In substantially greater numbers than non-Head Start counterparts, they went to school on testing days and took their achievement tests. In the 1974 and 1975 cohorts as well, both Head Start and Get Set children tended to miss fewer tests than their nonpreschool counterparts; the effect sizes for these cohorts were primarily in the moderate range. In all four cohorts, children with preschool experience were less likely to miss achievement tests.

It should be noted that the lower rate of missing tests was not simply the result of lower absence rates. Even when absence rates were controlled, both Head Start and Get Set children tended to take their tests more often than nonpreschool children.

Missing School and Missing Tests

Absence and missing test data are statistically and conceptually related. Together they point to a broader construct, which might be called "avoidance of school." Children staying home from school more frequently than comparable peers—and doing so especially on days when standardized tests are given—are likely to be avoiding school. We could also suggest that these children (and/or their parents) have a lesser "commitment to schooling," to borrow a phrase from the Ypsilanti project.[6]

Whether the higher absence levels and missing data of non-Head Start children reflected a stronger school aversion, a lesser commitment or both, the picture was one of children and families for whom staying out of school was acceptable. Many of these children were low achievers. While many Head Start children were also achieving at a low level, there was an important difference in their behavior with respect to the school. Head Start/Get Set graduates more often persevered; non-Head Start children more often opted out. Even when they had academic difficulties, Head Start children did not tend to react by missing school and missing tests.

Without going out too far on a speculative limb, we raise a possibility for reflection and further research. The fact that Head Start children are more regular in attending school and showing up to take tests may bode well for their functioning in the job market and other "real-life" responsibilities outside of school. This suggestion is consistent with the Ypsilanti group's finding that program graduates had a lower incidence of unemployment and delinquency. More research is needed to confirm this relationship, but we raise a possibility for consideration: Head Start children may have learned the valuable lesson that the first step to success is showing up.

[6] Berrueta-Clement et al., 1984.

IV. SCHOOL SUCCESS: RETENTION IN GRADE & ACHIEVEMENT TEST PERFORMANCE

RETENTION IN GRADE

More Head Start children than comparison children were able to meet minimal school standards for progression through the grades. From kindergarten through sixth grade, fewer were retained in grade.

Retention in grade, along with special education assignment, has been examined by a number of researchers as an important indicator of children's progress following Head Start or other early intervention. The classroom teacher, who has known the child over the course of the school year, makes the decision to recommend retention. In the teacher's perception the child is unable to function adequately at grade level.

Retention in grade is usually experienced as failure by the child and the family. In addition, retention in grade, like special education, bears costs to society, since more money must be spent in providing educational services to the child. To improve children's school functioning to the extent that such special measures are not needed is to produce an outcome of real value to children and their families and to society.

Several studies in the literature provide information on grade retention, as well as special education placement, following Head Start participation. Based on an analysis of several studies, the Head Start Synthesis Project[1] concluded that Head Start children tended to have lower rates of grade retention and special education.

Less frequent retention in grade and special education assignment were the most clearcut and dramatic results in the pooled analyses of the Consortium for Longitudinal Studies.[2] Based on the six Consortium projects with appropriate data on these indicators, researchers concluded that there was "strong and robust evidence" that early education significantly reduced the number of low-income children assigned to special education. For instance, in Ira Gordon's project, 54 percent of the control children and only 23 percent of the program children were later assigned to special education. In

---

[1] *The Impact of Head Start on Children, Families and Communities.* Final Report of the Head Start Evaluation, Synthesis and Utilization Project. Washington, D.C.: CSR, Incorporated, 1985.

[2] Consortium for Longitudinal Studies. *Lasting Effects After Preschool,* 1978.

Susan Gray's project, 29 percent of the control children as compared to only 3 percent of the program children were later placed in special education.

Consortium findings on grade retention were less striking but similar in pattern. Though only one of the six studies yielded significant differences when analyzed separately, retention was found significantly lower for program children when project data were statistically pooled. Presumably grade retention would have been even lower for the program groups were it not for reduced special education placement; low-achieving children who would otherwise have been in special education were able to stay in regular education and thus were in the pool that might be retained.

Districts, schools and teachers vary widely in their policies and practices with respect to retaining students in grade, and policy may shift from year to year. It is therefore not surprising to find large project-to-project differences in the percentage of children retained in grade. What is striking is the similarity in *pattern*. Sometimes retention in grade was very common and sometimes less so, but where there were differences it was consistently the preschool graduates who were retained less often.

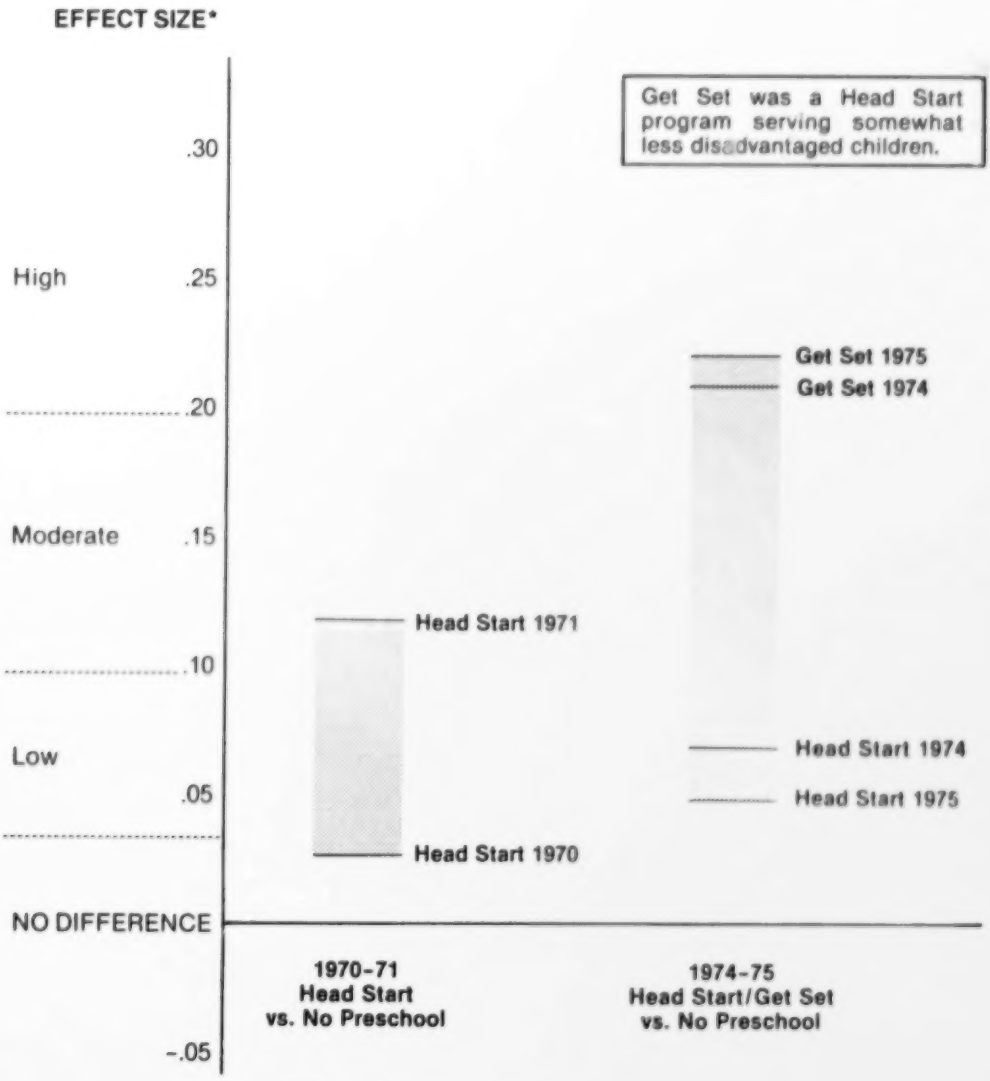
In summary, special education placement and grade retention data from Head Start and Consortium studies suggest these related effects: Compared to controls, more program children continued to perform well enough to stay in regular education and at grade level; those program children who did not stay with their classmates were more likely to be merely retained rather than placed in special education (usually seen as a more extreme step). However, we should note that the number of studies involving Head Start children was small and most of the non-Head Start studies involved children from preschool programs with resources far beyond those of the typical Head Start. The Philadelphia data offered an opportunity to test the possibility that Head Start lowers grade retention with a much larger and more representative group of children that attended public Head Start programs.

The Philadelphia Study

Analysis of grade retention data was approached by counting for each grade the children who had been retained in that grade or earlier. Children once retained in grade were included in the retained percentage for their original cohort (1971, for instance), even though they were no longer attending classes with that cohort. The percent retained accumulated over the grades; the Percent Retained Score for any given grade is the sum of all children retained up to that point divided by the number of children in the original cohort (multiplied by 100). In order to take into account the changing number of children in each grade through attrition, this analysis was limited to only those children remaining in the sample until the completion of data collection. Only data through sixth grade were included in the analysis; seventh grade comparisons were muddied by the greatly increased variability resulting from children changing schools after sixth grade.

Table 4. Effect Sizes for Grade Progression/Retention

(Based on group differences in cumulative % of children retained in grade)



*Positive effect size = More favorable outcome for Head Start/Get Set children than for comparison children

Effect sizes were computed on the basis of the Percent Retained Scores; they are presented in Table 4. The effect size is large for the Get Set groups (1974 and 1975 cohorts), moderate for the 1971 Head Start children, and relatively low for Head Start children in the 1974 and 1975 cohorts. It should be noted that retention in grade was markedly higher for Head Start boys than Head Start girls in two of the cohorts; additional research is needed on differences in the way Head Start boys and girls perform and the way they are perceived by teachers.

Significance of Retention in Grade

The Philadelphia data replicated earlier findings: *Educationally at-risk children attending preschool programs such as Head Start are less often retained in subsequent grades.* This outcome is closely related to the outcome reported by the Consortium for Longitudinal Studies and other investigators—that fewer graduates of early intervention programs were placed in special education in later grades. These two sets of findings (on grade retention and special education placement) reinforce each other in suggesting that programs like Head Start play a significant role in reducing the more extreme forms of school failure.

We should note that retention and special education placement are both decisions based on someone's (primarily the teacher's) overall perception of the child. While test scores are bound to influence this perception, it is also likely to be shaped by a host of subjective impressions. The teacher may react to the child's alertness, task orientation, perseverance, attitudes toward school, and other behaviors, forming a global impression of how much "promise" the child has for performing adequately in the next grade. The Philadelphia data replicate the finding that teachers more often perceive Head Start graduates as having sufficient promise to progress to the next grade level.

ACHIEVEMENT

On reading achievement Head Start graduates performed at a slightly but not significantly higher level than comparison children up to third grade. From third grade on, no performance differences were found as a function of preschool experience.

Among the most popular yardsticks in the Head Start-related literature have been scores on standardized achievement tests. The achievement data analyzed in the Philadelphia study were reading scores from the Wide Range Achievement Test (WRAT), the Metropolitan Achievement Test (MAT), and the California Achievement Test (CAT).

Since the early 1970s, the School District of Philadelphia has been engaged in a major and increasingly successful program to improve children's scores on the standard tests

used in the system. As part of the initiative to upgrade performance, children in the Philadelphia data base were placed in various K-3 models. These educational innovations and initiatives raised the performance of Philadelphia children as a group, and, at the same time, may have added to the data more variability, and thus more "noise."

At any rate, the Philadelphia results were consistent with the large literature on later achievement test performance of children who attended Head Start. At the end of Head Start and similar preschool programs, graduates typically have been found to perform significantly better than comparison children on standardized achievement tests and intelligence tests.[1] Several years later, program children were sometimes doing a little better on achievement tests than comparison children. After three years or so, however, virtually all differences in test scores had faded. Here and there a study has found children from Head Start or a similar program outperforming comparison children on achievement tests in later grades, but the rarity of finding these differences makes them difficult to interpret.

As in previous studies, Philadelphia Head Start/Get Set children showed an achievement advantage in reading for the first few years. After this point, the non-preschool children performed at essentially the same level as the Head Start/Get Set children. Girls performed at a higher level than boys in all groups.

The Disparity in Head Start's Impact on Retention and Achievement

The picture that emerges in the Philadelphia data is not new. This large and representative data base confirms and extends the pattern seen in the Consortium results and past Head Start findings: Children who receive a Head Start-style preschool experience show immediate benefits on achievement tests, and these may last a year or two. At the same time, they are less frequently retained in grade (and less frequently placed in special education, according to studies with these data). In the long run, one might say, while Head Start and other preschool graduates do not outperform comparison children on "objective measures" of academic performance (standardized tests), they are *perceived* as functioning more adequately by teachers and others. Presumably this perception is based on actual differences in children's behavior, perhaps even in their academic performance, differences that do not show up on standardized tests.

---

[1] *The Impact of Head Start on Children, Families and Communities.* Washington, D.C.: CSR, Incorporated, 1985.

In the Philadelphia data, certain differences in student behavior are documented. Head Start graduates miss fewer school days, especially testing days. As we have suggested, this difference may reflect Head Start children, and perhaps their parents, having a different attitude toward school and a more positive view of their abilities. Certainly such a difference in orientation to school and self-concept could influence teacher perceptions.

There are other possible explanations for this disparity; there are many things about Head Start children that we do not know. Perhaps they differ from comparison children in class participation. Perhaps they respond more readily to teacher questions. Subtle differences such as whether a child meets the teacher's eye when asked a question can affect the perception of the child's interest, alertness, motivation and academic potential. Past research using personality tests and teacher rating scales has shown that Head Start children, at least for a few years after the program, rate above comparison children in social behaviors. More research using direct classroom observation of specific child behaviors is needed to give us more specific information about what Head Start does. To better understand program outcomes and create further program improvements, we need to take a closer look at the Head Start children *in action in the school setting.*

V. LASTING EFFECTS OF HEAD START: DISCUSSION AND POLICY IMPLICATIONS

Shaping intelligent policy depends on more than documenting program outcomes. We need to ask not only "Does Head Start work?" but "*How* does Head Start work?" To maintain a program's strength, and certainly to improve it, we need some understanding of how the program is succeeding and how it is falling short of its goals. These are difficult and complex questions to answer, but they are vital.

Through What Dynamics Are Head Start Effects Sustained?

The Philadelphia results and past studies tell us that Head Start is a program that not only works but "goes on working." Even years after preschool, Head Start children still look different from non-Head Start children in important ways. They participate more fully in school and are less often identified as children with serious academic problems. Though as a group Head Start children do not outperform comparison children on achievement tests, they are more often seen as able to hold their own in the regular classroom at grade level.

The question is "Why?" What changes does Head Start produce in children, and how are they sustained year after year? The better we understand the dynamics of Head Start's effects, the better we can answer the policy question: How can Head Start achieve even greater changes in the future? In seeking to understand how Head Start's impact is sustained, these questions come to mind:

(1) Does Head Start produce long-term cognitive effects that enable children to do better in school?

(2) Does Head Start teach children adaptive skills that enable them to handle the school experience more easily or to impress teachers more favorably?

(3) Does Head Start increase children's confidence or change their orientation to school — for instance, enhancing commitment to school or reducing negative feelings and school avoidance?

(4) Does Head Start have a long-term effect on parents, improving parenting competence, family stability or other dimensions that have continuing positive effects on children?

Of course, there are other possible dynamics, including community changes (i.e., an improved community that continues to benefit children and families) or nutritional and health benefits (i.e., an improved health status that boosts children's school performance by increasing alertness and well-being). In fact, Head Start's benefits to child health and to communities are documented, and these benefits may well contribute to sustaining children's functioning in school. However, neither health nor community factors on their own explain the full scope and pattern of outcomes that emerged in the Philadelphia data and other findings in the literature. Let us consider each of the possible dynamics suggested above.

Long-term Cognitive Effects?

As noted in Chapter IV, there is little research evidence to support the idea that Head Start produces sustained cognitive advantages. By the measures used in most studies (achievement and intelligence test scores), Head Start graduates do better than comparison children for a few years after Head Start, but their advantage fades. Of course, there may be important cognitive changes we have not yet been able to measure.

After all, no one has claimed that achievement tests, or even IQ tests, reflect all aspects of the child's cognitive functioning. Furthermore, we know that disadvantaged children often do not "test well" in terms of showing their full aptitude on standardized tests. Data from Philadelphia and other studies tell us that teachers in later elementary grades perceive Head Start children as more academically adequate than non-Head Start counterparts. So it is certainly plausible that Head Start children are maintaining some sorts of cognitive benefits, though these are not showing up on standardized tests.

Adaptive Skills?

Perhaps Head Start children learn skills for dealing more successfully with the school environment. Teachers are likely to be favorably impressed, for instance, when children are cooperative, task-oriented, responsive to feedback, strong in self-help skills, or active in class participation.

The question arises: Do Head Start children show more positive classroom behaviors than non-Head Start children (thus creating more favorable teacher perceptions)? Based on five studies, which primarily used self-report and teacher ratings, the Synthesis Project concluded that Head Start was highly effective in promoting positive social behavior in the early years of school.[1] Though more observational studies are needed for a fuller picture of precisely what adaptive behaviors Head Start promotes, the evidence does suggest that Head Start has a substantial impact in this area.

[1] *Impact of Head Start on Children, Families and Communities*. Washington, D.C.: CSR, Incorporated, 1985.

Greater School Commitment (or Less School Avoidance)?

Are children who have attended Head Start less inclined than controls to see school as hostile, frightening, or unimportant? Although there is little direct evidence on these questions in the Head Start literature, relevant data were gathered by the Perry Preschool Program, which, like Head Start, provided a preschool experience for disadvantaged children. At age 15, as compared to nonpreschool counterparts, program graduates placed higher value on schooling, had higher aspirations about college, showed greater willingness to talk to their parents about school, reported spending more time on homework, and rated themselves higher on school ability. Even at age 19, the preschool graduates saw their school experience as more positive than did comparison children.[2]

Providing preschool experience to a similar population, Head Start may also develop such attitudes in children. Indication of improved attitudes toward school is seen in the Philadelphia Head Start children's tendency to attend more regularly and miss fewer tests. The data also suggest this possibility: The initial Head Start performance advantage reduces school anxiety at a crucial time, and this tendency to be more at ease in school is maintained to some extent in later grades. Such a reduction of school anxiety could explain Head Start graduates being less prone to avoid school.

A closely related possibility is improvement in the Head Start child's self-concept, particularly the academic self-concept. Certainly Head Start teachers work to promote children's self-esteem. In addition, research has shown that children's self-concept is linked to school performance.[3] Therefore, it is reasonable to surmise that doing relatively well in the early grades, as Head Start children have been found to do, gives their self-concept a lasting shot in the arm.

Effect on Parents?

Because any long-term impact on parents must continue to affect children, Head Start has always emphasized parent education and involvement. Based on program experience and research results, many policymakers believe that further improvement of the parent component is vital to increasing Head Start impact.

For the most part, it seems to be a relatively small core of parents who are actively involved in Head Start and with their children's development. Research tells us that it is these parents whose children perform best on cognitive measures. Mothers who actively

---

[2] Berrueta-Clement et al. *Changed Lives: The Effects of the Perry Preschool Program on Youths Through Age 19.* 1984, 8.

[3] Educational Testing Service. Predictive value of measures of self-esteem and achievement motivation in four- to nine-year-old children. *Disadvantaged Children and Their First School Experiences: ETS-Head Start Longitudinal Study.* Princeton, NJ: ETS, 1975.

participate in Head Start are happier, less anxious and depressed, and show improved psychological well-being, as compared to mothers who participate less.[4] (Of course, happier and less anxious mothers are probably more likely to get involved in the first place).

About a third of Head Start families report being helped with family problems by Head Start referral to other community resources.[5] The help and parent education that families receive directly from Head Start, as well as the referrals to other community services, are likely to have some effect in reducing stress and enabling families to function more adequately. Even relatively minor improvements in the family environment can be a significant boost to children's development and functioning.

The importance of the family in the child's development and performance over time is difficult to pin down experimentally, but it is unquestionable. Since the family is a critical mediating link in the ongoing impact of Head Start on the child, further efforts to enhance parent involvement should be encouraged.

FUTURE DIRECTIONS

The evidence on Head Start's lasting effects is far from complete. In many cases, before we can understand the dynamics through which Head Start is influencing children, we need more specific knowledge about outcomes. In some cases, we can make fairly solid judgments about what factors in the Head Start program are particularly important. Based on available evidence, the following directions would appear to be useful for Head Start.

Extending Parent Involvement

Parent involvement in Head Start needs to be examined closely and improved. Highly effective Head Start parent programs should be identified and studied. Features of these exemplary programs can be incorporated into model options, which then can be implemented in test settings, and, if successful, disseminated throughout the Head Start community.

We may also get some valuable clues from looking at what has been done in early intervention programs other than Head Start. For instance, one feature of Consortium projects as a group was close contact between project staff and families *after* preschool programs ended. Needing to keep track of families for research purposes and having the resources to stay in touch, these projects provided a great deal of ongoing contact. By design or by serendipity, such continuation of interest and contact may have been a considerable force in maintaining lasting effects.

---

[4] *The Impact of Head Start on Children, Families and Communities.* Washington, D.C.: CSR, Incorporated, 1985.

Although Head Start's resources for ongoing contact with families will never equal those of small research projects, there are possible strategies for keeping in touch. For example, a creative idea within Head Start for extending program impact is to team new Head Start families with "alumni families" for mutual support. In addition to providing a support system and family role model to families entering the Head Start program, this approach keeps the "alumni families" involved in Head Start and its goals.

Head Start's home-based option emphasizes parents becoming more effective educators of their children. To achieve this goal, the home-based program strives to increase parents' knowledge of child development and introduces them to activities that support children's intellectual and socioemotional growth. By strengthening the parent-as-educator emphasis in center-based programs as well, Head Start can enhance parents' involvement with their children's development, their sense of their own parenting competence, and the positive impact they continue to have on their children.

Helping to Sustain Head Start Children's Gains in Public Schools

Because it is during the elementary grades that the initial Head Start performance advantage fades, many researchers and policymakers have suggested that we look to public schools for the explanation—and the remedy—for the diminished impact of Head Start. This perspective does not imply that blame should be cast on public schools; their task is a very difficult one and their resources are finite. What it does imply is that Head Start may be able to do more to assist public schools in better serving Head Start children. The public schools are charged with educating all children; Head Start has a more specific focus—children who are educationally at-risk because they are from low-income families. Having had the task of concentrating on this population of children and families, Head Start staff have gained specialized knowledge, experience and awareness of their needs.

This knowledge can be put to greater use through close cooperation between Head Start and the public schools at all levels. Head Start and Department of Education personnel should have an ongoing dialogue aimed at integrating what is known about Head Start children and families into public school programs. At regional, state and local levels, Head Start grantees should work with the public schools on transition issues—through developing manuals, curriculum materials and guidelines, and other information-sharing strategies. Head Start is presently exploring such ways of facilitating children's transition to the public schools.

An increased Head Start emphasis on developmental assessment would also give Head Start teachers and parents more knowledge about children's competencies as they leave Head Start and begin elementary school. By sharing this information with elementary schools through a developmental profile on each child, Head Start could give public school teachers a much fuller picture of children's educational strengths and needs.

These are actions that Head Start can take to help the public schools better serve Head Start children. But policymakers must recognize that Head Start can only do so much. In the end, it is the public school's task to sustain children's learning and development. They must be given the support and resources needed to do their job, and they must be held accountable for doing it.

Meeting Individual Needs

In the Philadelphia data and in the Head Start-related literature, there is abundant evidence that Head Start affects children in different ways and to varying degrees. Gender differences, for example, recur in the Philadelphia data and in past research, with girls often found to retain positive Head Start effects to a greater extent than boys do. Other factors that have been found to affect child outcomes include age or developmental level at program entrance, socioeconomic status of the family, and pretest IQ of the child.

It has been argued that Head Start would produce greater benefit to more children if classroom programs were more attuned to individual needs and abilities. Teachers need help in such individualization. A new Head Start initiative allows each child to *identify for the teacher* what he or she is ready to learn. This comprehensive system provides diagnostic tools for the teacher to assess each child's developmental level and a wide range of curriculum materials keyed to what the child needs. The research evidence suggests that Head Start can increase its effectiveness by responding in a more fine-tuned way to children's individual differences in development and learning style. Efforts should be made to coordinate this initiative with the public schools, so that the skills Head Start children develop in the course of their preschool experience may be sustained and built upon in the elementary years.

In Conclusion

The Philadelphia data supply some very useful pieces to the puzzle that researchers and policymakers have continued to consider: To what extent and in what ways does Head Start produce lasting effects on children and families? A large-scale, public school data base of this kind is extremely valuable in extending past findings from programs that were designed, operated and monitored by researchers.

The positive impact on children documented by these data should provide strong encouragement to those inside and outside the Head Start community. Now when it is more vital than ever to halt the downward spiral of poverty, it is important to know that Head Start plays a significant role in doing so. Even more importantly, these findings

and other new information about Head Start should be used to further improve the program. Some directions for enhancing Head Start have been suggested above. We encourage policymakers and educators to think long and hard about other changes that may be needed, and we urge them to take action to bring about innovations and improvements in Head Start and in the public schools.